CLAIMS

Sub B 1.   A method for transmitting time-sensitive information over a
2   wireless voice-over-data communication system, used in conjunction with a
predefined data protocol, comprising the steps of:
4   defining a minimum segment size for information to be transmitted;
defining a maximum segment size for information to be transmitted, said
6   second segment size greater than said first segment size;
generating a first segment from said time-sensitive information if a
8   sufficient quantity of said time-sensitive information is available for
transmission, said first segment having a segment size between said minimum
10   segment size and said maximum segment size; and
generating a second segment having a segment size less than or equal to
12   said maximum segment size upon the occurrence of a predefined event.

2.   The method of claim 1 wherein said predefined event comprises
2   the receipt of an acknowledgment message.

3.   The method of claim 1 wherein said maximum segment size is
2   negotiated between a transmitter and a receiver.

4.   An apparatus for transmitting time-sensitive information over a
2   wireless voice-over-data communication system, used in conjunction with a
predefined data protocol, comprising:
4   means for negotiating a maximum segment size with a receiver;
a memory for storing a minimum segment size;
6   a queue for storing data frames, said data frames representing time-
sensitive information; and
8   a first processor for generating at least one segment from said data
frames stored within said queue when a segment size greater than or equal to
10   said minimum segment size can be generated from said data frames.

5.   The apparatus of claim 4, further comprising a vocoder for
2   generating data frames from said time-sensitive information.

6.   A method for transmitting time-sensitive information over a
wireless voice-over-data communication system, used in conjunction with a
predefined data protocol, comprising the steps of:

storing time-sensitive data in a queue, said time-sensitive data
comprising data frames;

generating at least one segment from said time-sensitive data, said at
least one segment comprising a predetermined number of data frames.

7.   The method of claim 6 further comprising the step of generating
said data frames from said time-sensitive information using a vocoder.

8.   An apparatus for transmitting time-sensitive information over a
wireless voice-over-data communication system, used in conjunction with a
predefined data protocol, comprising:

a queue for storing data frames, said data frames representing time-
sensitive information; and

a processor for generating at least one segment from said data frames
when a predetermined number of said data frames are available in said queue.

9.   The apparatus of claim 8 further comprising a vocoder for
receiving said time-sensitive information and for generating said data frames.

10.   A method for transmitting time-sensitive information over a
wireless voice-over-data communication system, used in conjunction with a
predefined data protocol, comprising the steps of:

storing vocoder frames in a queue, said vocoder frames representing
time-sensitive information;

determining the number of bits contained within each of said vocoder
frames;

adding bits to any of said vocoder frames which does not contain at least
a predetermined number of bits.

11.   Apparatus for transmitting time-sensitive information over a
wireless voice-over-data communication system, used in conjunction with a
predefined data protocol, comprising:

a queue for storing vocoder frames, said data frames representing time-
sensitive information; and

a processor for adding random bits to any of said data frames which
does not contain at least a predetermined number of bits.